O P E 44

PTO/SB/08A (07-05)
Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

lute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 4 Sheet 1 U.S. PATENT DOCUMENTS Document Number Name of Patentee or Applicant of Cited Document Publication Date Peges, Columns, Lines, Where Rele Cite No.1 Passages or Relevant Initials Number - Kind Code² (if known) Figures Appear US 2002/010262 07-24-2003 Kayatal U3 2003 0173727 00-10-2002 Wang et al 09-25-2003 US 2003-0180756 Yang Shi et al. FOREIGN PATENT DOCUMENTS Foreign Patent Document Pages, Columns, Lines, Name of Petentee or Examiner Where Relevant Applicant of Cited Country Code3 - Number4 - Kind Code5 (# Passages or Relevant Initials MM-DD-YYYY T⁶ Figures Appear

Examiner Signature	/Dana Shin/	Date Considered	10/27/2009	

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 690. Draw line through citation if not in conformance and not considered, include copy of this form with not communication to applicant." Applicant's unique citation designation number (optionals." See Mindle Coder of Communication (1997) Polared Local Coder of Coder

Intersection is naturally.

This collection of information is required by 37 CPR 1.97 and 1.98. The information is required to obtain or retain is bornelf by the public which is to file (and by the Intersection) is required to process) an application. Confidentially is governed by 30 LES. 1/2 and 37 GPR 1.14. The calculation is defined to late? A how to complete, but the confident is confident and the confident is confident to complete, and the confident is confident is confident in the confident is confident in the confident in the calculation of the confident is confident in the confident in the confident is confident in the confident in the

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/08B(07-05)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO				Complete if Known		
				Application Number	10/576,481	
	RMATION			Filing Date	April 21, 2006	
STA	STATEMENT BY APPLICANT			First Named Inventor	Zissimos Mourelatos	
				Art Unit	To be determined	
	(Use as many sheets as necessary)			Examiner Name	To be determined	
Sheet	2	of	4	Attorney Docket Number	UPN0028-100 (Q3313)	

		NON PATENT LITERAT	URE DOCUMENTS				
Examiner Initials *	Cite No.						
	AD	Bernstein, E. et al., "Role for a bidentate ribonuclease in the initiation step of RNA interference," Nature (lan 18.2001), 409,363-3.					
	AE	Carmell M. A. et al., "The Argonaute family: te stem cell maintenance, and tumorigenesis," Ge					
	AF	Catalanotto, G. et al., "Gene silencing in worm	s and fungi," Nati	ure (Mar 16, 2000) 404, 245.			
	Doi N. et al., "Short-interfering-RNA-mediated gene silencing in mammalian cells requires Dicer are elF2C translation initiation factors," Curr Biol (Jan 8, 2003), 13,41-6.						
AH Elbashir et al., "Functional anatomy of siRNAs for mediating efficient RNAi in I melanogaster embryo lysate," Embo J (Dec 3,2001), 20,6877-88.				cient RNAi in Drosophila			
	ΑI	Fire et al.," Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans," Nature (Feb 19,1998), 391,806-11.					
	AJ	Grishok et al., "Genes and mechanisms related to RNA interference regulate expression of the small temporal RNAs that control C. elegans developmental timing," Cell (Jul 13,2001), 106, 23-34.					
	AK	Hamilton et al., "A species of small antisense RNA in posttranscriptional gene silencing in plants," Science (1999), 286, 950-2					
	AL	Hammond, S. M. et al., "Argonaute2, a link between genetic and biochemical analyses of R Science (Aug 10,2001), 293,1146-50.		biochemical analyses of RNAi,"			
	AM	Hutvagner et al., "A cellular function for the RNA-interference enzyme Dicer in the maturation of the let-7 small temporal RNA," Science (Aug 3,2001), 293, 834-8.					
	AN	Hutvagner et al., "A microRNA in a multiple-turnover RNAi enzyme complex," Science (Sep 20,2002), 297,2056-60.					
Examiner Signature		/Dana Shin/	Date Considered	10/27/2009			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. Appearan a unique cuasiou i vesignation numer (проковы). Applicant is to pace a crock mark five it engines inaquage l'randation is attached. This collection of information is required by 3 CTR. 1.8. This collection of information is required by the public which is to file (not by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CTR. 1.4. This collection is estimated to take 2 hours to complete, including gathering, propering, and selecting the completed application from the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this firm another suggestions for reducing the busines, should be sent to the Chief Information Officer, U.S. Prieston of Transferrant Office, U.S. Prieston Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/08B(07-05) Approved for use through 07/31/2006, OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449B/PTO Complete if Known Application Number 10/576,481 INFORMATION DISCLOSURE Filing Date April 21, 2006 STATEMENT BY APPLICANT First Named Inventor Zissimos Mourelatos Art I Init To be determined (Use as many sheets as necessary) Examiner Name To be determined Sheet 3 of 4 Attorney Docket Number UPN0028-100 (Q3313)

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, dvip and/or ocunity where published.	T²
	AO	Jackson A.L. et al., "Expression profiling reveals off-target gene regulation by RNAI," Nat Biotechnol (Jun, 2003), 6,635-7.	
	AP	Ketting, R.F. et al., "Dicer functions in RNA interference and in synthesis of small RNA involved in developmental timing in C. elegans," Genes Dev (Oct 15,2001), 15, 2654-9.	
	AQ	Knight, R.W. et al., "A role for the RNase III enzyme DCR-1 in RNA interference and germ line development in Caenorhabditis elegans," Science (Sep 21,2001)., 293, 2269-71.	
	AR	Lagos-Quintana et al., "Identification of novel genes coding for small expressed RNAs," Science (2001) 294, 853-8.	
	AS	Lau C. et al., "An abundant class of tiny RNAs with probable regulatory roles in Caenorhabditis elegans," Science (Oct 26,2001), 294, 858-62.	
	AT	Lee et al., "An extensive class of small RNAs in Caenorhabditis elegans," Science (Oct 26,2001), 294, 862-4.	
	AU	Lee, R.C. et al., "The C. elegans heterochronic gene lin-4 encodes small RNAs with antisense complementarity to lin-14," Cell (Dec 3,1993), 75,843-54.	
	AV	Llave C. et al., "Endogenous and silencing-associated small RNAs in plants," Plant Cell (Jul, 2002), 14,1605-19.	
	AW	Llave C. et al., "Cleavage of Scarecrow-like mRNA targets directed by a class of Arabidopsis mtRNA," Science (Sep 20,, 2002), 297,2053-6.	
	AX	Martinez J. et al., "Single-stranded antisense siRNAs guide target RNA cleavage in RNAi," Cell (Sep 6,2002), 110, 563-74.	
	AY	McManus, T. et al., "Gene silencing in mammals by small interfering RNAs," Nat Rev Genet (Oct, 2002), 3, 737-47.	

Examiner Signature	/Dana Shin/	Date Considered	10/27/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

Applicants unujue catalon edisgration number (optional). *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CPR 1981 her information is required to obtain or retain a benefit by the public which is to file (and by the USPTO I process) an application. Confidentially is governed by 3 S U.S.C. 122 and 3 T CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/S8088(07-45)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent an Trackmark Office, U.S. (DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contrists availed OMB control number

Substitute for form 1449B/PTO			Complete if Known		
			Application Number	10/576,481	
		DISCLOSURE	Filing Date	April 21, 2006	
STA	TEMENT BY	' APPLICANT	First Named Inventor	Zissimos Mourelatos	
			Art Unit	To be determined	
	(Use as many shee	ts as necessary)	Examiner Name	To be determined	
Sheet	4	of 4	Attorney Docket Number	UPN0028-100 (Q3313)	

		NON PATENT LITERAT	URE DOCUMENTS				
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), litle of the article (when appropriate), litle of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	AZ	Mourelatos, Z. et al., "miRNPs: a novel class of microRNAs," Genes Dev (2002) 16, 720-8.	of ribonucleoprote	ins containing numerous			
	ВА	Nykanen, A. et al., "ATP requirements and si interference pathway," Cell (Nov 2, 2001), 107,		NA structure in the RNA			
	ВВ	Olsen P.H. et al., "The lin-4 regulatory RNA o elegans by blocking LIN-14 protein synthesis 15,1999), 216, 671-80.	ontrols developme after the initiation	ental timing in Caenorhabditis of translation," <i>Dev Biol</i> (Dec			
	вс	Palatnik et al., "Control of leaf morphogenesis by microRNAs," Nature (Aug 20,2003), 257-263.					
	BD	Plasterk R.H. et al., "RNA silencing: the genor 296,1263-5.	me's immune syst	em," , Science (May 17,2002),			
	BE	Reinhart B.J. et al., "The 21-nucleotide let-7 RNA regulates developmental timing in Caenorhabditis elegans," Nature (Feb 24,2000), 403, 901-6.					
	BF	Reinhart B.J. et al, "Small RNAs correspond to centromere heterochromatic repeats," Science (2002) 297:1831.					
	BG Rhoades M.W. et al., "Prediction of plant microRNA targets," Cell (Aug 23,2002), 110, 513-20.						
	вн	Seggerson K. et al., "Two genetic circuits repress the Caenorhabditis elegans heterochronic gene lin- 28 after translation initiation," <i>Dev Biol</i> (Mar 15,2002), 243, 215-25.					
	Bl	Tabara et al., "The rde-1 gene, RNA interference, and transposon silencing in C. elegans," Cell (Oct 15,1999), 99, 123-32.					
Examiner		/Dana Shin/	Date Considered	10/27/2009			

*EXAMINER: initial if reference considered, whether or not clation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with end communication to applicant.

Applicants control contro

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.